The Relationship Between Weight Loss Success and Dysfunctional Attitudes Scale of Obesity (DASOB) and Automatic Thoughts Scale of Obesity (ATSOB) Scores of Obese Patients

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Abstract- The main purpose of this study is to investigate the relationship between weight loss success and Dysfunctional Attitudes Scale of Obesity (DASOB) and Automatic Thoughts Scale of Obesity (ATSOB) scores of obese patients. 70 obese participants were taken from patients of a private practicing nutrition and diet clinic who applied for the first time. After the patients decide to enroll to the study, scales were given. Three month diet therapy is carried out weekly with the aim of weight loss. As a result the findings of this study suggests that if we can predict Dysfunctional Attitudes of patients related with obesity before starting, we can differentiate the patients who can not adhere themselves to diet protocols without additional psychological help.

Keywords: Dysfunctional thoughts, Dysfunctional beliefs; Dysfunctional attitudes; Cognitions; Weight-loss success; Obesity; Automatic Thoughts

I. INTRODUCTION

Obesity is a global epidemic (Abelson and Kennedy, 2004) and a worlwide public health problem (World Health Organisation; WHO, 1997). Medical care costs for the health problems hosted by obesity keeps growing (Cawley, and Meyerhoefer, 2012).

Weight loss success is highly related with dysfunctional beliefs; for example "all or none" type dychotomic thinking style is very important in terms of outcomes of weight loss programs (Beck, 2007, O'Connor and Dowrick, 1987; Okumuşoğlu, 2014; Werrij et al., 2009). When people has dysfunctional attitudes as "since I ate something I shouldn't suppose to eat, I should better leave my diet for the rest of the day" or dysfunctional thoughts as "I can eat this because," despite the fact that reduction of daily calorie methods brings successfull outcomes with some obese individuals, it doesn't work for these people who has saboteur cognitions since they couldn't adhere themselves to application and continuation of the necessary strategies (Beck, 2007; O'Connor and Dowrick, 1987; Okumuşoğlu, 2014; Werrij et al., 2009).

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In the light of the related literature, the main purpose of this study is to investigate the relationship between weight loss success and Dysfunctional Attitudes Scale of Obesity (DASOB) and Automatic Thoughts Scale of Obesity (ATSOB) scores of obese patients.

II. METHODS

Subjects are 70 volunteer obese (Body Mass Index; BMI≥30) participants who doesn't have any other chronic disease. Participants were taken from patients of a private practicing nutrition and diet clinic who applied for the first time. Explanations have been done and individuals are asked either they want to be volunteer or not.

The age range of the participants is between 18 and 50 (M= 30,242 and SD=9,404).

55 of them are female and 15 of them are male, 36 of them are married and 34 of them are not married. In terms of educational level of participants; there are 9 primary, 38 high school, 14 graduate and 9 postgraduate degrees.

After the patients decide to enroll to the study scales were given. Patients body mass rate (BMR) which is necessary to determine the calorie of the diet therapy is calculated by using Harris Benedict Formula (Tüfekçi Alphan, 2013) and three month diet therapy is carried out by weekly sessions with the dietitician with the aim of weight loss.

III. INSTRUMENTS

Dysfunctional Attitudes Scale of Obesity (DASOB)

DASOB is an 18 item self report inventory, which rated on a seven point (1-7) likert scale, which include items such as "I should diet absolutely or I should not diet."; "Since I am too stressfull right now, I have right to eat this food." and which is constructed to assess dysfunctional attitudes related with weight loss success (Okumuşoğlu, 2015).

Automatic Thoughts Scale of Obesity (ATSOB)

ATSOB is a 17 item self report inventory which rated on a five point (1-5) likert scale, which include items such as "I can eat this because everyone is eating"; "I can eat this because it is not a whole piece" and which is constructed to assess self deceiving, saboteur dysfunctional automatic thoughts related with dieting (Okumuşoğlu, 2015).

VI. PROCEDURE

The study protocol followed the ethical guidelines of Turkish Psychological Association. Every participant was volunteer, and informed consent was obtained from each



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participant. Self report inventories were given in random order to prevention of any possible sequence effect. After three months diet period, subjects are assigned to "succesfull" and "unsuccesfull" groups. Subjects who adhere themselves to diet given by the dietician and who lost at least %10 percent of their previous weight are assigned to "succesfull" group and subjects who couldn't to "unsuccesfull" group. Analysis are conducted to see if there is a relationship between DASOB and ATSOB scores of the subjects and at least %10 less BMI change realization.

V. RESULTS

Analysis of variance between group and DASOB and ATSOB scores

One way variance analyses have been performed to evaluate the relationship between groups in terms of DASOB and ATSOB variables. Independent variable was group and dependent variable was mentioned scale scores.

In terms of the relationship between DASOB scores and group, ANOVA was found statistically significant, F(1,68)=6,244, p<.05, η^2 =.084. The group who realized %10 weight loss reduction (M=56,233, SD=17,511) differed significantly from the group who couldn't (M=66,500, SD=16,630).

On the other hand, ANOVA was not founded statistically significant for the relationship between ATSOB scores and group.

VI. CONCLUSIONS

The results of this study, suggests that patients who have lower mean scores on DASOB scale were the individuals who could be able to realize %10 weight reduction in three months.

According to this it can be said that the relationship between having less depressive, saboteur, distorted, & dysfunctional cognitions and succesfull weight management seems notable

This finding is consistent with suggestion which emphasize dysfunctional beliefs causes adoption of ineffective mood regulation strategies (Gagnon, Daelman, and McDuff, 2013) and with the other studies which emphasize weight loss succes is related with dysfunctional thoughts, attitudes and cognitive distortions (Beck, 2007; O'Connor, and Dowrick, 1987; Stahre, Tarnell, Hakanson, and Hallstrom, 2007; Werrij et al., 2009).

According to results it can be said that DASOB scores can be usefull to differentiate the future success outcome's of patients who enroll weight reduction interventions. In other words DASOB can help to differentiate "succesfull" and "unsuccesfull" to be groups from each other. But ATSOB scores does not.

These findings are also consistent with the literature (Okumuşoğlu, 2015) which suggests DASOB could differentiate "succesful obeses" from "unsuccesfull obeses" and from the obeses from general society who does not apply to get professional diet help, but ATSOB could only differentiate "succesful obeses" from the "the obeses who does not look for help".

The results of this study suggests that if the Dysfunctional Attitudes of patients related with obesity could be predicted before starting diet, differentiation of these patients who can not be able to adhere themselves to diet protocols without additional psychological help could be possible at the very begining and hence, future success of weight loss diet therapies could be enhanced.

REFERENCES

- 1] Abelson, P., & Kennedy, D. (2004). The obesity epidemic. (Editorial). *Science*, (5676), 1413-1413.
- [2] Beck, J. S. (2007). Beck diet solutions. Alabama: Oxmoor House Cawley, J., & Meyerhoefer, C. (2012). The medical care costs of obesity: An instrumental variables approach. Journal of Health Economics, 31 (1), 219–230.
- [3] Gagnon, J., Daelman, S., & McDuff, P. (2013). Correlations of impulsivity with dysfunctional beliefs associated with borderline personality. *North American Journal of Psychology*, 15(1), 165-178.
- [4] O'Connor, O. J., & Dowrick, P. W. (1987). Cognitions in normal weight, overweight, and previously overweight adults. *Cognitive Therapy and Research*, 3 (11), 315-326.
- [5] Okumuşoğlu, S. (2014). The personality factors and cognitive factors related with weight loss success in obesity. Unpublished manuscript. Aegean University Institute of Social Sciences.
- [6] Okumuşoğlu, S.(2015). Reliability, validity and factor analysis of dysfunctional attitudes scale of obesity (DASOB) and automatic thoughts scale of obesity (ATSOB). *International Journal of Management and Humanities (IJMH)*, 1 (6), 11-17, ISSN: 2394-0913.
- [7] Stahre, L., Tarnell, B., Hakanson, C. E., & Hallstrom, T. (2007). A randomized controlled trial of two weight-reducing short-term group treatment programs for obesity with an 18-month followup. *International Journal of Behavioral Medicine*, 14, 48–55.
- [8] Tüfekçi Alphan, M.E. (2013). Hastalıklarda beslenme tedavisi. Ankara: Hatiboğlu Yayıncılık.
- [9] Werrij, M. Q., Jansen, A., Mulkens, S., Elgersma, H. J., Ament, A. J. H.A., & Hospers, H. J. (2009). Adding cognitive therapy to dietetic treatment is associated less relaps in obesity. *Journal of Psychosomatic Research*, 67, 315-324.
- [10] World Health Organization [WHO]. (1997). Prevention and management of the global epidemic of obesity. In Report of the WHO, Consultation on Obesity. Geneva, June, (p.3-5). Geneva: WHO.

